

United States Department of Agriculture  
Animal and Plant Health Inspection Service  
Plant Protection & Quarantine  
4700 River Road  
Riverdale, MD 20737

**Controlled Import Permit to Import Restricted or Not Authorized Plant  
Material**  
**Regulated by 7 CFR 319.6**

**This permit was generated electronically via the ePermits system**

<b>PERMITTEE NAME:</b>	Dr. Jorge Dubcovsky	<b>PERMIT NUMBER:</b>	PCIP-19-00447
<b>ORGANIZATION:</b>	University of California	<b>APPLICATION NUMBER:</b>	P588-190727-001
<b>ADDRESS:</b>	One Shields Avenue Davis, CA 95616	<b>DATE ISSUED:</b>	10/03/2019
<b>MAILING ADDRESS:</b>	One Shields Avenue Davis, CA 95616	<b>FACILITY NUMBER:</b>	4457
<b>PHONE:</b>	(530) 752-5159	<b>EXPIRES:</b>	<b>10/03/2021</b>
<b>FAX:</b>	(530) 752-4361		
<b>GROWING LOCATION:</b>	One Shields Avenue Davis, CA 95616		

**PORTS OF ENTRY:** MD, Beltsville

Under the conditions specified, this permit authorizes the following:

<u>Article(s)</u>	<u>Countries of Origin</u>	<u>Plant Parts</u>	<u>Grown in U.S.</u>	<u>Intended Use</u>	<u>Total Qty</u>	<u>Qty per Shipment</u>	<u>Number of Shipments</u>
Wheat Seeds	Various Flag Smut Countries	Seed	Yes (Greenhouse)	Breeding	Bags of 100 g	20 Bags of 100 g	10

**SPECIAL INSTRUCTIONS TO INSPECTORS**

See permit conditions below

Seeds should be free of pests.


**PERMIT CONDITIONS**

This permit authorizes the importation of the listed articles, under the conditions specified below. A copy of this permit (including all conditions) must accompany all shipments authorized under this permit.

In addition to this permit, genetically engineered plant materials regulated by 7 CFR Part 340 must be imported with a valid APHIS 2000 Permit or Notification. Please call (301) 851-3935 or email [Biotechquery@aphis.usda.gov](mailto:Biotechquery@aphis.usda.gov) for more information.

Receipt or use of foreign isolates or samples from countries under sanctions requires specific permission from the U.S. Department of Treasury (see <http>)

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 <b>Pauline Spaine</b>	<b>10/03/2019</b>

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<http://www.treasury.gov/resource-center/sanctions/Programs/Pages/Programs.aspx> for current country/regional listings) for current country listings.

Any person who violates the Plant Protection Act (PPA) of the United States, individuals or corporations who fail to comply with these conditions and authorizations, or who forge, counterfeit, or deface permits may be criminally or administratively prosecuted and found guilty of a misdemeanor which can result in penalties, a one-year prison term, or both. Additionally, any person violating the PPA may be assessed civil penalties of up to \$250,000 per violation or twice the gross gain or gross loss for a violation that results in the person deriving pecuniary gain or a pecuniary loss to another, whichever is greater. In addition, all current permits may be cancelled and future permit applications denied.

This APHIS-issued import permit only covers compliance with APHIS regulations and requirements. Therefore, this APHIS permit for the commodity to be imported does not reduce or eliminate the permittee's legal duty and responsibility to likewise comply with all other Federal and State regulatory requirements applicable to the commodity to be imported.

Some plants may be subject to regulations under the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES). To determine if a particular species is regulated under Appendix I, II, or III of CITES, please consult the appendices for CITES located at <https://ecos.fws.gov/ecp0/reports/ad-hoc-species-report?kingdom=P&status=E&status=T&status=EmE&status=EmT&status=EXPE&status=EXPN&status=SAE&status=SAT&fcritab=on&fstatus=on&fspecrude=on&finvpop=on&ffgroup=on&fffamily=on&header=Listed+Plants>


This permit authorizes the importation of wheat seeds from various Flag smut countries to Jorge Dubcovsky at the University of California for performance evaluation and increase in the APHIS approved facility #4457.

1. The person who is issued this PPQ Controlled Import Permit (CIP) and his/her employees or Agents, shall comply with the following permit conditions, which are deemed by the USDA APHIS Administrator to be necessary to prevent the dissemination and establishment of plant pests.

The permit holder must:

- (a) be at least 18 years of age, have and maintain an address in the United States that is specified on the permit, and be physically present during normal business hours at that address during any periods when articles are being imported or moved interstate under the permit.
- (b) notify the PPQ-CIP unit if it is necessary to transfer of permit ownership, and changes in address or phone number.
- (c) keep the CIP permit valid for the duration of possession of any imported plant material that is maintained under his/her possession until released from permit requirements as directed in this permit.
- (d) maintain the regulated plant material only at the location specified in the permit, and dispose of the material as described in the permit conditions.
- (e) notify the PPQ-CIP unit, within 3-5 days, of any signs of potential disease symptoms such as wilting, dying or sudden death, or accidental release or destruction of regulated plant material.
- (f) notify the PPQ-CIP unit of the receipt of any unauthorized plant material not listed on the permit.

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(g) notify the PPQ-CIP unit, within 3-5 days, if facilities which contain imported plant material are renovated, decommissioned for any reason or severely damaged by natural disaster.

(h) destroy all regulated plant material prior to the permit holder's departure from the approved facility unless other arrangements are confirmed by the PPQ-CIP unit, or unless a new permit is in place with a responsible party at the facility.

(i) Notification or Contact information for PPQ-CIP unit: Telephone (301) 851-2046 or (877) 770-5990 (Toll-Free Automated System); Fax (301) 734-5786; Email: [controlled.import.permits@aphis.usda.gov](mailto:controlled.import.permits@aphis.usda.gov).

2. The plant materials must be selected from apparently disease-free and pest-free sources, free of federal noxious weeds and soil. All regulated plant material is subject to inspection at a PPQ Plant Inspection Station (PIS) at the time of entry to the U.S. If found infected/infested at the PIS/port of entry, plant material may be destroyed, treated or returned to the exporter at the permittees expense.

3. Fungicidal or insecticidal dusts, powders, slurries, etc., shall not be applied before shipment. If pesticides are found, seeds will be returned to the shipper.

4. After the imported material is removed from the shipping container, the container must be bagged and sterilized by autoclaving, destroyed by double bagging and incineration, or double bagged and taken to a municipal landfill.

5. Inspection:

(a) All regulated plant material is subject to inspection at a PPQ Plant Inspection Station (PIS) at the time of entry to the U.S. If found infected/infested at the PIS, plant material may be destroyed, treated or returned to the exporter at the permittees expense.

(b) Imported plant material may be refused entry if coated or covered with fungicide, insecticide or any other treatments that obscure inspection.

6. Notification:

(a) Upon arrival of each shipment at the facility/location, the permittee shall notify, by email, the State Plant Health Director (<https://www.aphis.usda.gov/planthealth/sphd>) and State Plant Regulatory Official (<http://nationalplantboard.org/membership/>).


(b) The SPHD and the PPQ-Plants for Planting Office ([Controlled.Import.Permits@aphis.usda.gov](mailto:Controlled.Import.Permits@aphis.usda.gov)) shall be notified within one week of any abnormality noticed in the plant material or if the plant material dies. Dead plant material shall be autoclaved or incinerated after being recorded.

7. Prior to use, all imported plant materials must be labeled "Quarantined material and stored in a locked cabinet or other secure location under the control of the permittee to prevent pilferage and unauthorized use.

8. The facility where the work is performed, and the imported plant materials are grown, are subject to unscheduled inspection by an APHIS representative during regular business hours. At the time of inspection, the importer must make records available for the imported material received under this permit.

9. Unused imported plant materials must be devitalized/destroyed by sterilization using an autoclave or by double bagging and incineration. All related plant waste will be autoclaved or double bagged and incinerated prior to disposal or double bagged and sent for burial to a municipal landfill.

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**10. Packaging and Shipment:**

- (a) The shipment must be accompanied by an invoice or packing list indicating its contents, which are clearly labeled, and include the permit number on the bill of lading.
  - (b) The imported plant material must be packaged sufficiently to prevent cross contamination during shipment.
  - (c) Imported materials must not be wrapped or otherwise packaged in a manner that impedes or prevents adequate inspection or treatment.
  - (d) The material must be shipped in a sturdy closed container that will prevent the possible escape or introduction of plant pests during shipment.
  - (e) Any packing material used in the consignment of the plant material must meet the requirements of § 319.37-9, and wood packing material used in the consignment must meet the requirements of § 319.40-3(b).
- Shipment:**

- (a) The yellow/green permit label issued with the permit must be used. The instructions are provided in the electronic label file. This colored label must be attached to the outside of the package and must be the only delivery address on the package. This label directs the package to the designated Plant Inspection Station. **DO NOT PLACE ANY OTHER DELIVERY ADDRESS ON THE OUTSIDE OF THE PACKAGE.**
- (b) Please include a copy of the permit inside the package.
- (c) The imported plant material should be packaged and safeguarded sufficiently to maintain isolation from the domestic environment during transportation.
- (d) A prepaid mailing label shall be included in each package. Alternatively, provide address labels (handwritten or typed) along with the shipping account to be charged to send the packages from the inspection station to your address.


11. The growing plants shall be examined during the seedling stage, before heading, and after heading by the Permit Holder's Pathologist for evidence of plant diseases, especially exotic strains of the flag smut disease: twisting and bending of the coleoptile in the seedling stage with the formation of bleached spots on the coleoptile. Later, greyish black linear sori on the older leaf blades and leaf sheaths. Any plants showing evidence of disease are to be immediately rogued and destroyed by incineration or autoclaving. It is the responsibility of the permittee to notify the pathologist so inspection not be delayed.

12. If flag smut or any exotic pathogen causing disease is detected in the greenhouse where the imported wheat is grown, the permittee shall immediately notify PPQ at Area Code 1-877-770-5990; [controlled.import.permits@aphis.usda.gov](mailto:controlled.import.permits@aphis.usda.gov).

13. After seed harvest, all vegetative parts of the plants, as well as the medium in which they grew, shall be sterilized in an autoclave or incinerated. All plant material of the same genus which have not been segregated from the imported materials shall be similarly autoclaved or incinerated. All containers (including shipping containers) which were used for imported plant materials shall be destroyed or autoclaved after use. All containers, equipment, etc., which came into contact with imported plant materials shall be sterilized or thoroughly cleaned.

14. Imported seeds which are not planted within 14 months after importation will be destroyed unless an extension is approved by PPQ. No imported seeds may be distributed to anyone for any purpose without prior approval from PPQ.

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15. Identity:

- (a) Before being used, all imported plant materials must be labeled "Quarantined material", and stored in a locked cabinet or other secure location under the control of the permittee to prevent pilferage and unauthorized use.
- (b) From the time of receipt and until the material is fully released by PPQ, the identity of all regulated material must be maintained throughout the permit period by visible labeling. The information on the label must contain the permit number, the genus, species and cultivar, country of origin and date of arrival. Each plant (and related increase) must be tracked and identifiable.

16. Monitoring and Record keeping:

- (a) The plants are to be examined periodically by your designated plant pathologist for evidence of plant diseases.
- (b) Records must be kept of all pest or diseases associated with the imported plants including abnormalities and death.
- (c) Records of any pesticide applications must be maintained.
- (d) The facility where the work is performed, and the imported plant materials are grown, are subject to unscheduled inspection by an APHIS representative during regular business hours. At the time of inspection, the importer must make records available for the imported material received under this permit.

17. Greenhouse requirements:

- (a) Access to the imported material must be limited to you, your designated plant pathologist and those you authorize to care for the plants.
- (b) A pest management program must be in place to effectively control diseases and pests including arthropods, and insect vectors (e.g. aphids, thrips, and white flies) that potentially could transmit pathogenic organisms.
- (c) Records must be kept of all pest or diseases associated with the imported plants that are discovered, as well as any pesticide applications that the plants receive.
- (d) A dedicated greenhouse, or a physical barrier such as an insect screening/cage within an approved greenhouse must be used to keep plants isolated and pests from disseminating.
- (e) The plant material from individual shipments must be separated physically from any domestic or other imported plants.

18. Quarantine evaluation:

- Any plants found to be diseased and/or having an abnormal symptoms should be removed and diagnosed for the pathogens listed below. These affected plants (and any dead plants) and their pots/media destroyed as described under the disposal condition group.
- Any virus testing data (ELISA or PCR-based) must be demonstrated before release is granted.

- a) The quarantine period for 6 to 8 months.

19. This permit does not authorize growing of wheat outside the designated greenhouse nor the transfer of imported seeds to anyone else

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20. Quarantine evaluation: The growing plants shall be examined during the seedling stage, before heading, and after heading by the Permit Holder's Pathologist for evidence of any plant diseases.

- Quarantine period for *Triticum* spp. is one growing cycle (6 to 8 months)
- Plants must be evaluated, and symptomatic plants tested for suspect pathogens including, but not limited to the following organisms:

Fungi: *Bipolaris sacchari*, *Puccinia graminis* f.sp. *tritici*, *Urocystis tritici*; *Pyricularia graminis-tritici* (Wheat blast), *Tilletia indica* (Karnal bunt) and *Urocystis agropyri* (Flag smut).

Nematodes: *Anguina tritici*; and,

Viruses: Rice stripe virus, Oat sterile dwarf virus, Rice black streak dwarf virus, Maize streak virus, Indian peanut clump virus and Peanut clump virus.

21. Flag Smut specific quarantine evaluation: These conditions apply if the seed originate from Afghanistan, Algeria, Armenia, Australia, Azerbaijan, Bangladesh, Belarus, Bulgaria, Chile, China, Cyprus, Egypt, Estonia, Falkland Islands, Georgia, Greece, Guatemala, Hungary, India, Iran, Iraq, Israel, Italy, Japan, Kazakhstan, Kyrgyzstan, Latvia, Libya, Lithuania, Moldova, Morocco, Nepal, North Korea, Oman, Pakistan, Portugal, Romania, Russia, Spain, Tajikistan, Tanzania, Tunisia, Turkey, Turkmenistan, South Africa, South Korea, Ukraine, Uzbekistan, and Venezuela.

a) Symptoms include twisting and bending of the coleoptile in the seedling stage with the formation of bleached spots on the coleoptile. Later, long grey-black streaks with greyish black linear sori develop on the older leaf blades and leaf sheaths. b) Any plants showing evidence of disease are to be immediately rogued and destroyed by incineration or autoclaving. The suspect pathogen(s) must be identified by taking samples before destruction of infected material with oversight of the assigned plant pathologist.

b) After seed harvest, all vegetative parts of the plants, as well as the medium in which they were grown, must be sterilized in an autoclave or incinerated.

Karnal bunt specific quarantine evaluation:


These conditions apply if the seed originate from Afghanistan, India, Iran, Iraq, Mexico, Nepal, Pakistan, and South Africa.

a) Disease symptoms on seed include discoloration of kernels; the dark colored teliospores may be viewed under a microscope.

b) Before general harvesting and threshing, a sample should be taken, threshed in a contained room, and examined by the Permit Holder's Pathologist for Karnal bunt disease (*Tilletia indica*). The sample should be 3 to 4 heads from 20 percent of the lines with each line threshed separately if seed is needed or by a bulk threshing if seed can be discarded.

c) Threshing of harvested heads is to be done only in a room/area that can be disinfected if Karnal bunt disease is found. The greenhouse benches/platforms must be disinfected as described in this permit under disinfection conditions.

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22. Disposal:

- (a) After the imported material is removed from the shipping container, the container must be bagged and sterilized by autoclaving, destroyed by double bagging and incineration, or double bagged and sent to a municipal landfill.
- (b) All discarded growing media, containers and plant material must be sterilized utilizing methods such as an autoclave, heat application of 121 degrees Celsius (250 F) for minimum of 30 minutes to the core of the treated material, chemical sanitation or incineration prior to disposal into a land fill or municipal sewage. Recommendations for time depending on the type of materials are enclosed below:  
<https://sterilizers.com/autoclave-time-temperature-pressure-chart.html>
- (c) Unused imported plant materials must be devitalized/destroyed by sterilization using an autoclave or by double bagging and incineration. All related plant waste will be autoclaved or double bagged and incinerated prior to disposal or double bagged and sent to a municipal landfill.

23. Release:


- (a) Prior to release, neither the imported material nor increases may be distributed to any person or location unless approved in advance by the PPQ Controlled Import Permit Unit.
- (b) A decision to grant or deny permission to release the plant material will be made at the conclusion of the required PPQ quarantine period. Release will require a written statement from the State Plant Health Director (SPHD) who will consult with the designated plant pathologist and both inspect the site for compliance and plants for any pests.
- (c) Alternatively, APHIS PPQ may prescribe additional treatments or measures, if warranted by pest and/or disease findings.

24. Permit validity and renewal:

- (a) Controlled import permits are initially issued for one (1) year and may be renewed for up to an additional two (2) years.
- (b) As part of the renewal package, the permittee must submit records that include propagation from the imported plant material, testing results, plant abnormalities and death, plant disposal information, and any pest or disease occurrences.

**END OF PERMIT CONDITIONS**

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